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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,773	08/07/2006	Cheol-Gwon Kang	5529CK-1	6011
22442	7590	09/26/2007		
SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202			EXAMINER TON, TRI T	
			ART UNIT 2877	PAPER NUMBER
			MAIL DATE 09/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/597,773

Applicant(s)

KANG ET AL.

Examiner

Tri T. Ton

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 08/07/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The information disclosure statement (IDS) submitted on 08/07/046 has been entered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### *Oath/Declaration*

3. The Oath and Declaration filed on 08/07/2006 is acceptable.

### *Drawings*

4. The drawings filed on 08/07/2006. These drawings are acceptable.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1, 2, 5, and 8 are rejected under 35 U.S.C. 102(b) as being taught by Hamada (U.S. Patent 6,369,899). Hereafter, "Hamada".

Regarding Claim 1, Hamada teaches irregular pattern generation means for generating an irregular pattern on a surface of an object to be measured (Figures 11a-b, 12a-c, 13a-c, 14a-b, 15a-b, 16a-b, column 3, lines 62-63, column 8, lines 48-60); photographing means for acquiring an image of the object on which the irregular pattern is generated (column 3, lines 60-62); a control unit for controlling the photographing means (column 10, lines 58-67, column 11, lines 1-6, Figure 5, element 211); and an operation unit for generating data on the 3-D shape by processing the image of the object acquired by the photographing means (column 3, lines 58-60, column 6, lines 4-10, column 13, lines 65-67, column 14, lines 1-7); wherein the irregular pattern included in the image is employed as a criterion for searching for correspondence with respect to the data on the 3-D shape while the photographed image of the object is processed into the data on the 3-D shape (column 3, lines 62-67, column 4, lines 1-4, Figures 11a-16b).

Regarding Claim 2, Hamada teaches the irregular pattern generation means being a projector, and the photographing means being at least one camera (column 3, lines 58-63).

Regarding Claims 5-6, 10-12, Hamada teaches the irregular pattern being a pattern in which an irregular portion/stripes being formed on/inserted between a regular pattern/stripes (column 6, lines 1-4, column 15, lines 29-35, Figure 12a, element K, Figure 14a, element C, Figure 15a, element M).

Regarding Claims 7, and 9, Hamada teaches the photographed image being represented using a gray value (Figure 12c), portions in which the gray value abruptly changes are recognized as edges (Figure 14b, 15b, 16b), (the middle line is edge), an edge at which the gray value irregularly changes due to the irregular portion is regarded as a reference edge (Figure 14a, element c, Figure 14B), and unique identifications are assigned to the edges (column 15, lines 49-58).

Regarding Claim 8, Hamada teaches generating an irregular pattern on a surface of an object to be measured in a form in which at least one irregular portion is formed on a regular pattern (column 6, lines 1-4, column 15, lines 29-35, Figure 12a, element K, Figure 14a, element C, Figure 15a, element M); acquiring an image of the object, on which the irregular pattern is generated, using photographing means (column 3, lines 60-62); and processing the image of the object into data on the 3-D shape using the irregular pattern (column 3, lines 58-60, column 6, lines 4-10, column 13, lines 65-67, column 14, lines 1-7), which is included in the image, as a criterion for searching for correspondence with respect to the data on the 3-D shape (column 3, lines 62-67, column 4, lines 1-4, Figures 11a-16b).

Though, in claims 3, and 4, Hamada does not teach using a cloth/a sock to generate irregular pattern. The examiner takes the Official Notice of the fact that using a cloth/a sock on which an irregular pattern is formed and that comes into contact with the surface of the object to generate irregular pattern. It is obvious to one having ordinary skill in the art at the time of the invention was made to use the method of Hamada in application by adding a cloth/a sock in

order to generate irregular pattern to "obtain precise information upon a three-dimensional configuration of an object" (as stated by Hamada, abstract, lines 1-3).

### ***Conclusion***

7. Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the **next reply** after the Office action in which the well known statement was made.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference of Hamada (U.S. Patent 6,369,899) teaches of various features similar to the claimed invention.

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***Fax/Telephone Information***

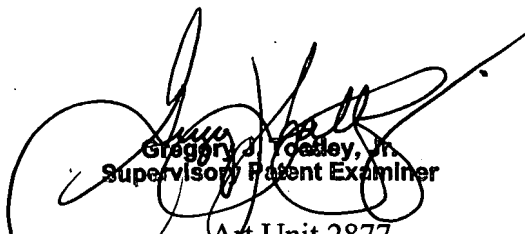
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri T. Ton whose telephone number is (571) 272-9064. The examiner can normally be reached on 10:30am - 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



September 13, 2007  
Examiner Tri Ton/SN



Gregory J. Toatley, Jr.  
Supervisory Patent Examiner  
Art Unit 2877  
Technology Center 2800  
13 Sept 07